

The Avoidable Causes of Cancer

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It has been estimated that perhaps 75 to 80% of all cancer in the United States is due, at least partly, to environmental factors and is, therefore, potentially avoidable. The importance of environmental exposures including behavioral factors has been evident in the international and regional variations in cancer incidence and mortality, the changes in cancer rates among migrant populations, time trends, clustering of cases detected by clinical observations and cancer mapping, ethnic and socioeconomic patterns, and most importantly, in analytic epidemiologic studies. Some environmental factors, notably tobacco and some occupational exposures, have substantial and well-established roles in the etiology of cancer, while the effects of certain other factors are less clear and require much more research. In April 1994, the President's Cancer Panel of the National Cancer Program hosted a conference on Avoidable Causes of Cancer. The conferees reviewed what is known about avoidable causes of cancer, suggested lines of further etiologic research, and discussed strategies for prevention. The conference demonstrated the power and success of the epidemiologic approach not only in identifying a number of

preventable environmental exposures as causes of cancer but also in promoting insights into the role of genetic susceptibility and even mechanisms of action, including host-environment interactions and the multistage process of carcinogenesis.

The organizing committee consisted of Dr. Devra Lee Davis, Office of the Assistant Secretary of Health, Department of Health and Human Services; Dr. Joseph F. Fraumeni, Jr., Dr. Robert N. Hoover, Dr. Edward J. Sondik, Dr. Philip R. Taylor, and Dr. Shelia Hoar Zahm, National Cancer Institute; and Dr. Maureen O. Wilson, Executive Secretary, President's Cancer Panel. The members of the President's Cancer Panel are Dr. Harold P. Freeman, Chair, Dr. Henry C. Pitot, and Frances M. Visco.

The organizers are grateful to Dr. Samuel Broder, former Director of the National Cancer Institute, for encouragement and guidance, and to the editors of *Environmental Health Perspectives Supplements* for publishing the conference proceedings, which we hope will accelerate further research into the causes of cancer and the means of prevention.